

CUSTOMER NO.: 24498**Serial No. 10/521,398**

Reply to First Office Action dated: 11/30/06

Response dated: 02/27/07

**PATENT
PU030148****RECEIVED
CENTRAL FAX CENTER****FEB 27 2007****REMARKS**

In the Office Action, the Examiner stated that claims 1-27 are pending in the application and that claims 1-5 and 8-27 stand rejected. The Examiner further noted that claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including the limitations of the base claim and any intervening claims. By this response, claims 1 and 15 are amended to more clearly define the invention of the Applicant and not in response to prior art. All other claims are unamended by this response.

In view of the amendments presented above and the following discussion, the Applicant respectfully submits that none of these claims now pending in the application are anticipated under the provisions of 35 U.S.C. § 102 or rendered obvious under the provisions of 35 U.S.C. § 103. Furthermore, the Applicant also submits that all of these claims now satisfy the requirements of 35 U.S.C. § 101. Thus, the Applicant believes that all of these claims are now in allowable form.

Rejections**A. 35 U.S.C. § 101**

Claims 15-27 were rejected under 35 U.S.C. 101 as allegedly being directed to a recording medium storing nonfunctional descriptive material. The Applicant respectfully disagrees.

With regards to Warmerdam, 33 F.3d at 1361, cited by the Examiner, the 'data structure' patent claim at issue which was held nonstatutory read as follows:

"6. A data structure generated by the method of any of Claims 1 through 4."

Warmerdam held that such patent claim regarding data structure generated from the process of making "bubble hierarchy" for controlling motion of objects to avoid collision with other objects lacked statutory subject matter, as data structure did not imply physical arrangement of contents of memory.

The Applicant strongly disagrees with the Examiner's allegation that claims 15-27 are directed to a 'data structure' as per Warmerdam. The present claims 15-27 are not claimed in that manner. Instead, the Applicant assert that the present claim 15 is directed to a functional, physical arrangement of layer elements

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on a storage medium, namely, an interleaved base and enhancement layer on a DVD medium. In the Applicant's invention, the functionality of the interleaved layers as claimed in claim 15 is clearly apparent, as such interleaved design advantageously enables the creation of DVDs which may be used to store both SD and HD versions of a movie on a single side of a DVD, as mentioned in the specification, e.g., at least on page 2, lines 4-25.

Accordingly, the DVD medium as presently claimed in claim 15 comprises a physical, interconnected and functional arrangement of contents of a memory medium (interleaved base and enhancement layers), and thus is asserted to comprise statutory subject matter which falls within the boundaries of 35 U.S.C. §101.

B. 35 U.S.C. § 102

The Examiner rejected the Applicant's claims 1-5, 8-12, 15-18 and 21-25 under 35 U.S.C. § 102(e) as being anticipated by Hughes, Jr. et al. (U.S. Patent Application No. 2004/0033061, hereinafter "Hughes"). The rejection is respectfully traversed.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1983)). (emphasis added). The Applicant respectfully submits that Hughes fails to teach each and every element of at least the Applicant's amended claim 1, which specifically recites:

" A method of providing multiple versions of a digital recording comprising the step of multiplexing a base layer with an enhancement layer, said base layer having base data including cells associated with base interleave units and representing a first version of the digital recording, and said enhancement layer having enhancement data including cells associated with enhancement interleave units, wherein said cells associated with said enhancement interleave units which can be combined with said cells associated with said base interleave units data to represent a second version of the digital recording." (emphasis added).

CUSTOMER NO.: 24498**Serial No. 10/521,398**

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**PATENT
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The Applicant's claims 1 and 15 have been amended to essentially recite, *inter alia*, "...said base layer having base data including cells associated with base interleave units and representing a first version of the digital recording" and "an enhancement layer having enhancement data including cells associated with enhancement interleave units, wherein said cells associated with said enhancement interleave units can be combined with said cells associated with said base interleave units to represent a second version of the digital recording."

In contrast to the invention of the Applicant, Hughes teaches a layered encoding system in which a DVD is provided with one data storage track used to store a base layer and a second data storage track to store an enhancement layer. In Hughes, a standard definition is generated by decoding the base layer data and a high resolution image is generated by decoding and combining both the base layer data and the enhancement layer data. However, Hughes fails to disclose or suggest at least a base layer having base data including cells associated with base interleave units and representing a first version of the digital recording, and enhancement data including cells associated with enhancement interleave units, wherein cells associated with said enhancement interleave units can be combined with said cells associated with said base interleave units to represent a second version of the digital recording, essentially as now claimed in amended claims 1 and 15.

The Applicant submits that there is no suggestion or mention in Hughes of base data including cells associated with base interleave units and enhancement data including cells associated with enhancement interleave units, wherein both such base/enhancement cells can be combined to represent a second version of a digital recording. Instead, Hughes' layered encoding process simply generally describes wherein base layer data is stored on a track assigned to a default camera angle, and enhancement layer data is stored on a second track which is assigned to an alternate camera angle. (See e.g., paragraph [0034]). The procedure for standard resolution decoding in Hughes involves wherein a DVD reader is limited to reading the base layer information contained in the default camera angle. High resolution decoding in Hughes involves a DVD reader reading compressed base layer data from a default camera angle track and additionally

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Response dated: 02/27/07

**PATENT
PU030148**

reading compressed enhancement layer data from a second camera angle track.
(See e.g., paragraphs [0040-0042]).

In contrast, in the Applicant's invention cells may be associated with one or more base/enhancement interleave units. This facilitates the creation of at least two program chains (one each for SD playback and HD playback). The SD program chain can link together the cells associated with the base interleave units and is recognizable by an SD-DVD player. The enhancement program chain can be recognized by hybrid HD-DVD players and can link together the cells associated with the base interleave units and the cells associated with the enhancement interleave units in an order appropriate for HD playback.

As such, the Applicant submits that Hughes absolutely fails to teach each and every element of the Applicant's claimed invention, arranged as in the claim as required for anticipation.

Therefore, the Applicant submits that for at least the reasons recited above, the Applicant's amended claim 1 is not anticipated by the teachings of Hughes, and, as such, fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Likewise, the Applicant's independent claim 15 recites similar relevant features as recited in the Applicant's claim 1. As such and for at least the reasons recited above, the Applicant submits that independent claim 15 is also not anticipated by the teachings of Hughes, and, as such, fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Furthermore, the Applicant's dependent claims 2-5, 8-12, 16-18 and 21-25 depend either directly or indirectly from the Applicant's independent claims 1 and 15 and recite additional features thereof. As such, the Applicant submits that at least because the Applicant's claims 1 and 15 are not anticipated by the teachings of Hughes, the Applicant further submits that the Applicant's dependent claims 2-5, 8-12, 16-18 and 21-25, which depend either directly or indirectly from the Applicant's claims 1 and 15, are also not anticipated by the teachings of Hughes, and, as such, fully satisfy the requirements of 35 U.S.C. § 102 and are patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

CUSTOMER NO.: 24498**Serial No. 10/521,398**

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The Examiner rejected the Applicant's claims 13-14 and 26-27 under 35 U.S.C. § 103(a) as being unpatentable over Hughes in view of Official Notice. The rejection is respectfully traversed.

The rejection of claims 13-14 and 26-27 is based, in part, on the contention that Hughes discloses or suggests the features of claims 1 and 15, from which such claims respectively depend. However, in light of the above amendments to claims 1 and 15 and the above remarks discussing same, it is clear that the combination of Hughes and Official Notice is legally deficient, since, at the very least, as explained above, Hughes does not disclose or suggest the features of presently amended claims 1 and 15, from which claims 13-14 and 26-27 respectively depend.

As such, the Applicant respectfully submits that at least because Hughes fails to teach, suggest or make obvious the Applicant's claims 1 and 15, the Applicant further submits that claims 13-14 and 26-27 are patentably distinct and non-obvious over Hughes and/or Official Notice for at least the reasons set forth above with respect to claims 1 and 15.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

Conclusion

Thus the Applicant submits that none of the claims, presently in the application, are anticipated under the provisions of 35 U.S.C. § 102 or rendered obvious under the provisions of 35 U.S.C. § 103. Furthermore, the Applicant also submits that all of these claims now satisfy the requirements of 35 U.S.C. §101. The Applicant would like to thank the Examiner for pointing out allowable subject matter, however the Applicant believes that all these claims are presently in condition for allowance over the cited prior art. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, or if the Examiner believes a telephone interview would expedite the prosecution of

CUSTOMER NO.: 24498

Serial No. 10/521,398

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Response dated: 02/27/07

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PU030148**

the subject application to completion, it is respectfully requested that the Examiner telephone the undersigned.

No fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account No. 07-0832.

Respectfully submitted,

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